

COMMUNITY EMERGENCY RESPONSE TEAM

SESSION III:

DISASTER MEDICAL OPERATIONS — PART 1

Michigan Version
Revised by: Michigan Citizen Corps Council
May 2003

EMERGENCY MANAGEMENT INSTITUTE

NATIONAL EMERGENCY TRAINING CENTER

DISASTER MEDICAL OPERATIONS

SESSION III

DISASTER MEDICAL OPERATIONS—PART 1

TIME: 2 hours 30 minutes

OBJECTIVES

At the conclusion of this session, the participants will be able to:

1. Identify the “killers.”
2. Apply techniques for opening airways, controlling bleeding, and treating for shock.
3. Conduct triage under simulated disaster conditions.

SCOPE

- Introduction And Session Overview
- Treatment Of Life-Threatening Conditions
- Triage
- Session Summary

TRAINING METHODS

The lead instructor will begin this session by welcoming the participants to Session III: Disaster Medical Operations—Part 1, and will introduce the instructors for the session. The instructor will then overview the topics of the session: treatment of life-threatening conditions that may be encountered (airway obstruction, bleeding, and shock), and conducting triage.

Next, the instructor will discuss and demonstrate the immediate procedures required for opening the airway, controlling bleeding, and treating for shock. The participants will have the opportunity to practice techniques for treating each of these conditions. During this period, some discussion will take place about the differences between disaster medical operations and the participants’ image of everyday first aid. (For example, mouth-to-mouth resuscitation and cardiopulmonary resuscitation (CPR) lose some of their importance in disaster situations.)

DISASTER MEDICAL OPERATIONS

TRAINING METHODS (Continued)

The next topic of this session will deal with triage. The instructor will open with a discussion of the meaning and goal of triage and provide background from the military's experience using triage for prioritizing treatment in multi-casualty situations. This background will lead to comparisons of triage in disaster circumstances and the steps that CERT members will follow when conducting triage.

Finally, the participants will practice triage evaluation and immediate treatment in a simulated multi-casualty exercise. This exercise will illustrate the need to conduct triage effectively and expeditiously under pressure and to focus on rescuer safety.

REFERENCES

Community Emergency Response Team Instructor Guide
Community Emergency Response Team Participant Handbook
Visuals 3.1 through 3.6

EQUIPMENT

In addition to the equipment listed at the front of this Instructor Guide, you will need the following equipment for this session:

- 1 mannequin.
- 1 box of latex examination gloves.
- 1 box of 4 × 4 bandages.
- 1 triangular bandage.
- 1 roll of roller gauze.
- Note cards, markers, and masking tape.

DISASTER MEDICAL OPERATIONS

PREPARATION The triage exercise near the end of this session requires materials prepared in advance of the activity. Prepare note cards listing the injuries of six “victims.” The class will be divided into groups of six, and each group will need a copy of the set of cards. See page IG III-26 for details.

NOTES

A suggested time plan for this unit is as follows:

Introduction And Session Overview	10 minutes
Treatment Of Life-Threatening Conditions	90 minutes
Opening The Airway	
Exercise: Opening The Airway	
Controlling Bleeding	
Exercise: Controlling Bleeding	
Recognizing And Treating For Shock	
Exercise: Treating For Shock	
Triage	45 minutes
Exercise: Conducting Triage	
Session Summary	5 minutes

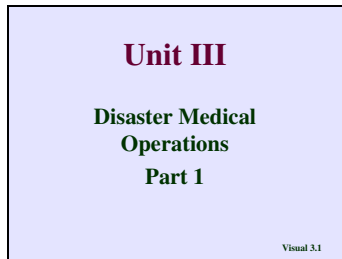
Total Time: 2 hours 30 minutes



Total Unit:
2 hours 30 minutes

Total Topic:
10 minutes

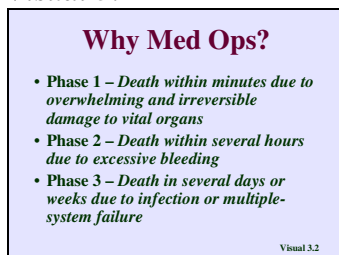
Visual 3.1



*Participant Hand-
book, page PH III-3.*

*Explain that these phases
represent the reason why
disaster medical operations are
conducted as they are*

Visual 3.2



SESSION III: DISASTER MEDICAL OPERATIONS—PART 1

INTRODUCTION AND SESSION OVERVIEW

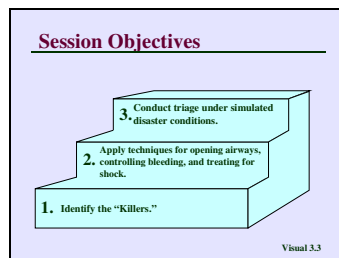
- Welcome the participants to Session III of the CERT training program.
-
- Introduce the new instructors for this session and asks each to briefly describe his or her experience in medical operations.
- Introduce this session by explaining that the need for disaster medical operation is based on two assumptions:
 - The number of victims will exceed local capacity for treatment.
 - Survivors will assist others. They will do whatever they know how to do but it cannot be assumed that most will know lifesaving first aid or post-disaster survival techniques.
- Add emphasis to the need for neighborhood-level medical operations by describing the three phases of death due to trauma:
 - *Phase 1:* Death within minutes due to overwhelming and irreversible damage to vital organs.
 - *Phase 2:* Death within several hours due to excessive bleeding.
 - *Phase 3:* Death in several days or weeks due to infection or multiple-system failure (i.e., not from the injury per se).

INTRODUCTION AND SESSION OVERVIEW

- Point out that experts agree that over 40 percent of disaster victims in the second and third phases of death could be saved by providing simple medical care.

Note that those who have taken first aid courses typically have the most difficulty adjusting to disaster medical operations.

Visual 3.3



- Add that CERT disaster operations personnel are trained to provide:
 - First aid treatment for life-threatening conditions—airway obstruction, bleeding, and shock—and for other less urgent conditions.
 - **The greatest good for the greatest number of victims** by conducting triage evaluations.
- Introduce the concept of Simple Triage And Rapid Treatment (START) when initially dealing with casualties in a disaster.
- Poll the group to see how many have taken first aid courses.

SESSION OBJECTIVES

- Tell the group that at the end of this unit, they will be able to:
 - Identify the “killers.”
 - Apply techniques for opening the airway, controlling bleeding, and treating for shock.
 - Conduct triage under simulated disaster conditions.
- Stress once more that **the goal of disaster medical operations is to do the greatest good for the greatest number.**

SUMMARY AND TRANSITION

? *Discussion question.*

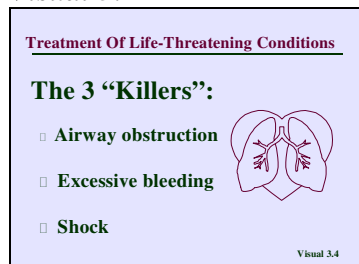
- Explain that this session will introduce the participants to disaster first aid treatment and the principles of triage. Tell the group that, through-out the session, they will have opportunities to practice the first aid techniques and, at the end of the session, they will have the opportunity to conduct triage evaluations in a simulated disaster.
- Ask the participants if anyone has any questions.
- Explain that the first section will deal with treatment for life-threatening conditions: airway obstruction, excessive bleeding, and shock.

YOUR NOTES:



*Total Topic:
1 hour 30 minutes*

Visual 3.4



RECOGNIZING AND TREATING LIFE-THREATENING CONDITIONS

- Introduce this section by telling the group that, in emergency medicine, airway obstruction, bleeding, and shock are "killers." The first priority of medical operations is to attend to those potential killers by:
 - Opening the airway.
 - Controlling excessive bleeding.
 - Treating for shock.
- Explain that this section will train the group to recognize the "killers" by recognizing their symptoms and their effects on the body.
- Remind participants to wear safety equipment: helmet, goggles, gloves, mask, and boots. Also, since speed is important, they could wear latex gloves under their work gloves.

INSTRUCTOR NOTES

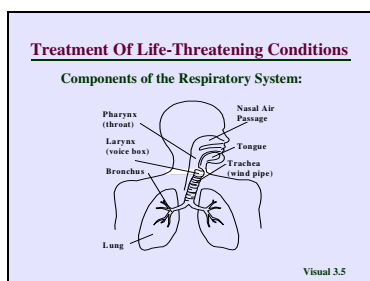
CONTENT/ACTIVITY

DISASTER MEDICAL OPERATIONS



Participant Handbook, page PH III-5.

Visual 3.5



Participant Handbook, page PH III-6.



Participant Handbook, page PH III-7.

Demonstrate each step slowly using the mannequin. Explain that proper technique is important, but so is speed if there are multiple victims.

Explain that this method causes little or no cervical-spine manipulation.

Visual 3.6

OPENING THE AIRWAY

- Display the components of the respiratory system. Point out that the respiratory system includes airways, lungs, and muscles.
- Point to the airway on the visual. Then ask the participants if they know what the most common airway obstruction is.

If not mentioned, tell the group that the most common airway obstruction is the tongue. (Refer the participants to the illustration in their Participant Handbooks.) Explain that, in an unconscious or semiconscious victim, especially one positioned on his or her back, the tongue—which is a muscle—may relax and block the airway. A victim with a suspected airway obstruction must be checked immediately for breathing and, if necessary, the airway must be opened.

- Explain that when an airway obstruction is suspected, CERT members should clear the airway using the Head-Tilt/Chin-Lift method. (Refer the participants to their Participant Handbooks.) This method involves the following six steps:
 - Step 1: At an arm's distance, shake the victim and shout, "Can you hear me?"
 - Step 2: If the victim does not or cannot respond, place one hand on the victim's forehead.
 - Step 3: Place two fingers of the other hand under the chin and tilt the jaw upward while tilting the head backward slightly.

INSTRUCTOR NOTES

CONTENT/ACTIVITY DISASTER MEDICAL OPERATIONS

Look, Listen & Feel

- **Step 1** – shake & shout
- **Step 2** – no response, begin procedure
- **Step 3** – start head tilt, chin lift
- **Step 4** – **L**ook for chest to rise
- **Step 5** – **L**isten for air exchange
- **Step 6** – **F**eel for abdominal movement

Visual 3.6

- Step 4: Look for chest rise.
- Step 5: Listen for air exchange.
- Step 6: Feel for abdominal movement.

Total Exercise: 15 minutes

Visual 3.7

AIRWAY Exercise

- **Find Partner**
- **1 person lie on floor**
- **Implement procedure**
- **Switch**
- **Do it again!**

Visual 3.7



Pair off the participants.

Observe each group and correct improper technique.

EXERCISE: OPENING THE AIRWAY

- Instructor Note: This exercise allows the participants to practice using the Head-Tilt/Chin-Lift method on each other. It is important to have other instructors who can help observe. However, make sure you all agree on the proper procedure. Follow the steps below to facilitate this exercise:
 1. Divide the participants into pairs.
 2. Ask the person on the right to be the victim and the person on the left to be the rescuer.
 3. Ask the victims to lie on the floor on their backs and close their eyes.
 4. Ask the rescuer to use the Head-Tilt/Chin-Lift method on the victim to open the airway.
 5. After the rescuer has made two or three attempts at using the Head-Tilt/Chin-Lift method, ask the victim and the rescuer to change roles.
 6. Allow each rescuer two or three observed attempts to use the Head-Tilt/Chin-Lift method.

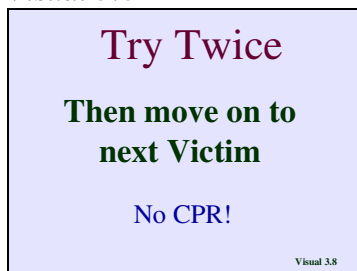
OPENING THE AIRWAY

INSTRUCTOR NOTES

CONTENT/ACTIVITY DISASTER MEDICAL OPERATIONS

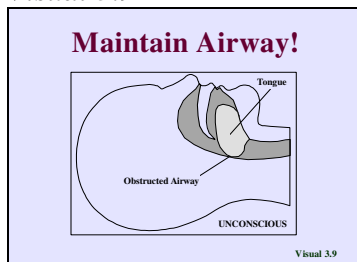
Explain that head injury refers to concussion, not head or facial cuts, although these may be indicators of head injury.

Visual 3.8



Demonstrate both techniques.

Visual 3.9



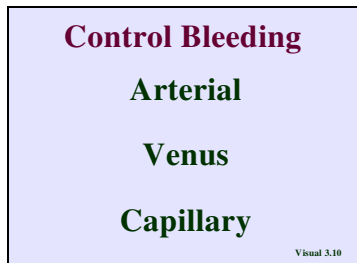
- After all participants have had the opportunity to be the rescuer, discuss any problems or incorrect techniques that were observed. Explain how to avoid the problems in the future.
- Remind the participants that, if they suspect that the victim has a head, neck, or spinal injury (all of which are most common in structural collapses), they should try lifting the victim's chin without tilting the head.
- Also remind the participants that part of **their mission is to do the greatest good for the greatest number of people**. For that reason, if breathing is not restored on the first try using the Head-Tilt/Chin-Lift method, CERT members should try again using the same method. If breathing cannot be restored on the second try, CERT members must move on to the next victim.
- Tell the group that, if breathing has been restored, the airway must still be maintained. One option is to use a volunteer or walking wounded to hold the head in place. The airway can also be maintained by placing soft objects under the victim's shoulders to slightly elevate the shoulders and keep the airway open.

SUMMARY AND TRANSITION

- Ask the participants if anyone has any questions about recognizing and clearing airway obstructions.
- Remind the group of the importance of opening the airway as quickly as possible.
- Tell the participants that in the next section, they will learn to recognize and treat uncontrolled bleeding.

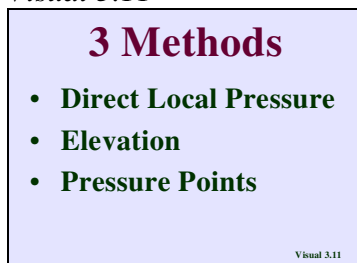
Participant Hand-book, page PH III-8.

Visual 3.10



Demonstrate each procedure on the mannequin or one instructor on another.

Visual 3.11



CONTROLLING BLEEDING

- Introduce this section by telling the group that uncontrolled bleeding initially causes weakness. If bleeding is not controlled, the victim will go into shock within a short period of time, and finally will die.
- Explain to the group that there are three types of bleeding and the type can usually be identified by how fast the blood flows:
 - *Arterial bleeding.* Arteries transport blood under high pressure. Bleeding from an artery is spurting bleeding.
 - *Venous bleeding.* Veins transport blood under low pressure. Bleeding from a vein is flowing bleeding.
 - *Capillary bleeding.* Capillaries also carry blood under low pressure. Bleeding from capillaries is oozing bleeding.
- Tell the group that there are three main methods for controlling bleeding:
 - Direct local pressure.
 - Elevation.
 - Pressure points.

INSTRUCTOR NOTES	CONTENT/ACTIVITY
DISASTER MEDICAL OPERATIONS	

Visual 3.12



Explain that the bandage maintains the direct pressure needed to stop the bleeding. CERT members continue to assess the victim's status. If the victim's limb is turning blue or becoming numb below the bandage, then it should be loosened.

Point out major pressure
Visual 3.13

Review dressing and bandaging requirements

- Sterile Dressing over the wound
- Clean Bandage over sterile dressing

Cover as much of the dressing ~~with~~ with the bandage as possible to protect the sterile surface of the dressing

- Explain to the group that local pressure combined with elevation is used to address 95% of bleeding. Demonstrate the procedure for controlling bleeding through direct local pressure:

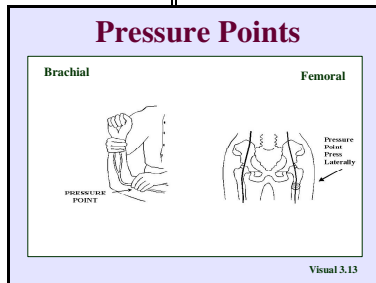
- Step 1: Place direct pressure over the wound by putting a clean pad over the wound and pressing firmly.
- Step 2: Maintain compression by wrapping the wound firmly with a pressure bandage.

Instructor Note: Direct pressure and elevation can take 5 to 7 minutes to work. Time is critical. Therefore, the use of a pressure bandage is necessary so that the rescuer can move on to the next victim.

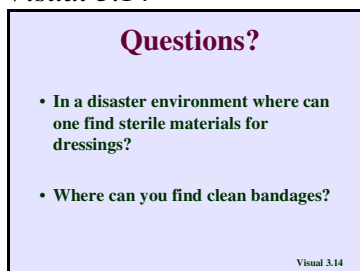
- Explain that a pressure bandage should be tied with a bow, so it can be loosened if necessary.
- Ask if anyone has any questions about applying a pressure bandage.
- Demonstrate the procedure for controlling bleeding through elevation: elevating the wound above the level of the heart. This can be used in combination with direct pressure.
- Tell the participants that there are also pressure points that can be used to stem the flow of bleeding. Explain that a pressure point is a pulse point for a

INSTRUCTOR NOTES

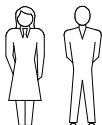
CONTENT/ACTIVITY DISASTER MEDICAL OPERATIONS



Visual 3.14

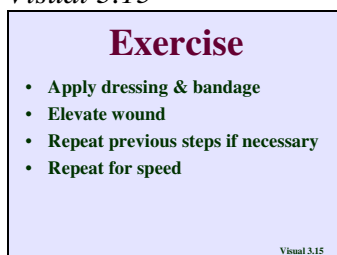


*Total Exercise:
15 minutes*



*Pair off the
participants.*

Visual 3.15



major artery and that pressure points can be located by finding a pulse. The pressure points most often used are the:

- Brachial point in the arm.
- Femoral point in the leg.

Motivate participants to get victims to help themselves whenever possible.

- Ask if anyone has any questions about pressure points.
- Ask Class: In a disaster environment, where can someone find materials for a sterile dressing?
- Ask Class: Where can someone find bandaging materials?

EXERCISE: CONTROLLING BLEEDING

- Instructor Note: This exercise allows the participants to practice the techniques for controlling bleeding on each other. Follow the steps below to facilitate this exercise:
 1. Divide the participants into pairs.
 2. Ask the older person to be the victim and the younger person to be the rescuer.
 3. Ask the victims to lie on the floor on their backs and close their eyes.
 4. Ask the rescuer to use direct local pressure to control bleeding from a simulated wound on the right forearm just below the elbow. Have the rescuer:
 - Apply a pressure bandage.
 - Elevate the arm.
 - Repeat these two steps.

INSTRUCTOR NOTES

CONTENT/ACTIVITY DISASTER MEDICAL OPERATIONS

Observe each group and correct any improper techniques.

Demonstrate use of the brachial pressure point by applying pressure to your own arm. Then have the participants apply pressure to their own arms so that they can feel the effect of this method.

Participant Hand-book, page PH III-12.

Visual 3.16

Tourniquet Use

- All other techniques **MUST NOT WORK**
- This is a **LAST RESORT**
- Two types may require it:
 - ✓ Crushing
 - ✓ Partial or Full Amputations
- This is a serious risk to the affected limb!

Visual 3.16

Demonstrate the proper use of a

- Repeat the two steps for speed.

5. After the rescuer has made at least three attempts at using each technique, ask the victim and the rescuer to change roles.

6. Allow each rescuer at least one observed attempt to use each technique.

- After all participants have had the opportunity to be the rescuer, discuss any problems or incorrect techniques that were observed. Explain how to avoid the problems in the future.
- During the discussion, ask the participants to apply pressure to the brachial pressure point on their own arms.

CONTROLLING BLEEDING (Continued)

- Tell the participants that if none of the other methods for controlling bleeding is successful, a tourniquet may be necessary.
- Stress that a tourniquet is *rarely* necessary and should be used only as a *last resort*—in a “life or limb” situation.
- Tell the group that the two types of injuries for which tourniquets are considered appropriate are:
 - Crushing-type injuries.
 - Partial amputations.
- Explain that using a tourniquet can pose serious risks to the affected limb, so one should not be used unless, without one, the victim will die from excessive blood loss.
- Point out that the most serious dangers from a tourniquet

tourniquet on the mannequin.

are:

Visual 3.17



- *Incorrect materials or application*, which increases the damage and bleeding.
- *Damage to the limb from a tourniquet*. Survival of the limb is almost never possible if a tourniquet is left in place too long. Only doctors should remove tourniquets.

- Tell the participants that if they must apply a tourniquet, they should:
 - *Leave it in plain sight*. Do not bandage over it or cover it.
 - *Attach an adhesive label to the victim's forehead* stating the time that the tourniquet was applied.
- Point out that the time that the tourniquet was applied can also be written in blood or with a magic marker directly on the victim's forehead.

Instructor Note: Remind participants that one of a CERT team's functions is to collect and record information. Pencils, markers, and tape are important items for the disaster preparedness kit.

- Stress the importance of appropriate medical personnel knowing how long the tourniquet has been on so that they can make an informed decision about the course of treatment.

SUMMARY AND TRANSITION

- Summarize the three ways to control bleeding:
 - Direct local pressure
 - Elevation
 - Pressure points



Participant Handbook, page PH III-15.

- Stress that bleeding must be controlled as quickly as possible so as not to endanger the victim's life from blood loss.
- Remind the group not to use a tourniquet unless the victim would otherwise die from excessive blood loss.
- Remind the group that they should always wear their rubber gloves and a mask as a protection against HIV, tuberculosis, and hepatitis.
- Ask the group if anyone has any questions about controlling excessive bleeding.
- Tell the group that the next section will deal with recognizing and treating for shock.

RECOGNIZING AND TREATING FOR SHOCK

- Explain that shock is a disorder resulting from ineffective circulation of blood. Remaining in shock will lead to the death of cells, tissues, and entire organs.
- Stress that the body will initially compensate for blood loss and mask the symptoms of shock. Stress the importance of continually evaluating patients for shock and monitoring their condition.
- Tell the group that the main signs of shock that CERT members look for are:

INSTRUCTOR NOTES	CONTENT/ACTIVITY
DISASTER MEDICAL OPERATIONS	

Visual 3.18

Treatment Of Life-Threatening Shock Conditions		
Sign	Symptom	Test
Breathing	Rapid, shallow	Greater than 30 per minute
Skin	Cold, pale	Capillary refill
Consciousness	Anxious/Apathetic; unconscious/comatose	Response to simple commands

Visual 3.18

Demonstrate each step using the mannequin.

Participant Hand-book, page PH III-14.

Visual 3.19

Treating for Shock
• <u>Step 1</u> – Lay victim on back if possible
• <u>Step 2</u> – Control Bleeding
• <u>Step 3</u> – Maintain Body Temperature
• <u>Step 4</u> – Avoid rough or excessive handling

Visual 3.19

- Rapid and shallow breathing.
- Capillary refill of greater than 2 seconds.
- Failure to follow simple commands, such as “Squeeze my hand.”
- Ask the participants to check their own capillary refill by pushing down on a fingernail and then releasing. Tell them to watch what happens. Ask one of the participants to explain. Then have the participants apply and release pressure on the palms of their hands. Explain that capillary refill is how long it takes for the color to return. Tell the group that this is called the “blanch test.”
- Demonstrate the procedure for treating victims of shock (refer the participants to the chart and illustration in their Participant Handbooks):
 - Step 1: Lay the victim on his or her back. Elevate the feet 6-10 inches. Maintain an open airway.
 - Step 2: Control obvious bleeding.
 - Step 3: Maintain body temperature. Cover the victim with a blanket, and place a blanket or other material under the victim to provide protection from extreme ground temperatures (hot or cold).
 - Step 4: Avoid rough or excessive handling.

RECOGNIZING AND TREATING FOR SHOCK

- Ask if anyone has a question about the signs or treatment of shock.
- Emphasize that victims who are suffering from shock should *not* eat or drink anything. People in shock may be nauseous and thirsty.

Total Exercise: 15 minutes

EXERCISE: TREATING FOR SHOCK

Visual 3.20

Exercise – Treat for Shock

Scenario

- You have come across a victim who has been bleeding profusely from a wound on the upper arm for an undetermined period of time.
- The victim is now unconscious
- Treat them!

Visual 3.20



Pair off the participants.

Observe each rescuer as he or she treats for shock.

Visual 3.21

It is recommended that regardless of the injury, and the victim is willing, to treat all victims for shock as a final treatment!

Visual 3.21

- Instructor Note: This exercise allows the participants to practice the steps for treating for shock on each other. Follow the steps below to facilitate this exercise:
 1. Divide the participants into pairs (the same pairs as in the previous exercises).
 2. Ask the person who was the rescuer first in the last exercise to be the victim first.
 3. Ask the victims to lie on the floor on their backs and close their eyes.
 4. Explain the following scenario to the rescuers:
 - You have come upon this victim who has been bleeding profusely from a wound of the upper arm for an undetermined period of time.
 - The victim is now unconscious.
 5. Ask the rescuer to treat the victim.
 6. When each rescuer has been observed treating for shock, ask the victim and the rescuer to switch roles.
- When all rescuers have had the opportunity to treat their victims, lead a discussion about any incorrect techniques observed and how to correct them in the future.

INSTRUCTOR NOTES	CONTENT/ACTIVITY
DISASTER MEDICAL OPERATIONS	

SUMMARY AND TRANSITION

? *Discussion question.*

- Summarize the key points about recognizing and treating for shock:
 - A victim may display one or more signs of shock.
 - If there is any reason to suspect shock, apply immediate treatment.
- Ask if anyone has any questions about the signs of shock or its treatment.
- Tell the group that, in a disaster scenario, they may have many victims requiring attention and few resources to use. The next section will deal with a system for prioritizing victim treatment called triage.

YOUR NOTES:

INSTRUCTOR NOTES

CONTENT/ACTIVITY

DISASTER MEDICAL OPERATIONS



Total Topic:
45 minutes



*Participant Hand-
book, page PH
III-16.*



Discussion question.

*The point of this discussion is to
get the participants thinking about
multiple casualties.*

Visual 3.22

Triage

- Triage is a French term which means “to sort”.
- In triage, victims are evaluated and sorted by the immediacy of the treatment needed.

Visual 3.22

Visual 3.23

Triage is used when:

- Rescuers are overwhelmed
- There are limited resources
- Time is critical

Visual 3.23

TRIAGE

WHAT IS TRIAGE?

- Ask the group how many remember the scenes from the television series *M*A*S*H* where the helicopters arrived and the doctors and nurses quickly examined each patient to determine the priority for treatment. During these scenes, the medical personnel:
 - Identified the dead and those who were too severely injured to be saved.
 - Sent those with relatively minor injuries and wounds to a holding area to await treatment.
 - Identified those who would die without immediate treatment and sent them to the operating room.
- Tell the participants that these scenes showed medical personnel conducting *triage*—a French term meaning “to sort.”
- Explain that in triage, victims are evaluated, sorted by the immediacy of the treatment needed, and set up for immediate or delayed treatment.

WHAT IS TRIAGE?

- Explain further that triage was, in fact, initiated by the military and that military experience has shown that triage is an effective strategy in situations where:
 - Rescuers are overwhelmed.
 - There are limited resources.
 - Time is critical.

INSTRUCTOR NOTES

CONTENT/ACTIVITY

DISASTER MEDICAL OPERATIONS

Emphasize that the victim's location comes into play when performing head-to-toe assessments. Triage needs to be done immediately to determine if the person is alive. Then the rescuer must decide what to do based on the condition of the building.
Visual 3.24

Triage Categories

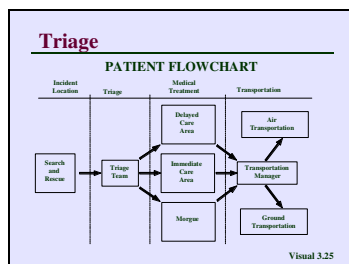
- **Immediate (I)** – Life threatening airway, bleeding or shock (ABC)
- **Delayed (D)** – Injuries do not immediately threaten life or limb
- **Dead (DEAD)** – No respiration after two attempts

Visual 3.24

Some participants may respond negatively to not performing CPR.

Explain that CPR is a maintenance therapy that requires time that may not be available when dealing with multiple casualties after a disaster. In the event that multiple casualties are not encountered, CPR may be administered by available personnel.

Visual 3.25



Visual 3.25

- Point out that triage occurs as quickly as possible after a victim is located or rescued. During triage, victims' conditions are evaluated and the victims are prioritized into three categories:
 - *Immediate (I)*. The victim has life-threatening (airway, bleeding, or shock) injuries that demand immediate attention to save his or her life; rapid treatment is imperative.
 - *Delayed (D)*. Injuries do not jeopardize the victim's life if definitive treatment is delayed. The victim may require professional care, but immediate treatment is not imperative.
 - *Dead (DEAD)*. No respiration after two attempts to open the airway. CPR is not performed in the disaster environment.
- Explain that, from triage, victims are taken to the designated medical treatment area (immediate care, delayed care, or morgue) and from there are transported out of the disaster area.

Instructor Note: Emphasize the need for rescuer safety during triage. Rescuers must wear all safety equipment, including latex gloves, goggles, a helmet, and a dust mask when examining victims and must change gloves between victims. Therefore, tell the group that their disaster kits should have a box of latex gloves.

Your Notes

INSTRUCTOR NOTES	CONTENT/ACTIVITY
DISASTER MEDICAL OPERATIONS	



Participant Handbook, page PH III-18 - 19.

Visual 3.26

Triage in Disaster

- Step 1 – Stop, Look, Listen, Feel & think
- Step 2 - Conduct Voice Triage
- Step 3 - Follow systematic Route

Visual 3.26

Visual 3.27

Triage in Disaster Cont.

- Step 4 – Evaluate victims and tag (I), (D) or (DEAD)
- Step 5 – Treat (I) victims immediately
- Step 6 – Document you activities

Visual 3.27

TRIAGE IN A DISASTER ENVIRONMENT

- Refer the participants to their Participant Handbooks. Explain the general procedure for conducting triage:
 - Step 1: Stop, Look, Listen, and Think. Before you start, stop and size up the situation by looking around and listening. THINK about how to approach the situation.
 - Step 2: Conduct voice triage. Begin by calling out something like, “Emergency Response Team. If you can walk, come to the sound of my voice.” If there are survivors who are ambulatory, instruct them to remain at a designated location, and continue with the triage operation. (If rescuers need assistance and there are ambulatory survivors, then these survivors should be asked to provide assistance.) These persons may also provide useful information about the location of the victims.
 - Step 3: Follow a systematic route. Start with the closest victims and work outward in a systematic fashion.
 - Step 4: Evaluate each victim and tag them **I** (immediate), **D** (delayed), or **DEAD**. Remember to evaluate the walking wounded.
 - Step 5: Treat **I** victims immediately. Initiate airway management, bleeding control, and/or treatment for shock for Category **I** victims.
 - Step 6: Document triage results for:
 - Effective deployment of resources.
 - Information on the victims’ locations.
 - A quick record of the number of casualties by degree of severity.
- Emphasize that the rescuer’s safety is paramount during triage. Tell the participants to wear proper protective equipment so as not to endanger their own health.

Participant Hand-book, page PH III-19.

Visual 3.28

Order of Triage Evaluation

- A = Airway
- B = Bleeding
- C = Control & treat for shock

This is in order of importance and precedence!

Visual 3.28

Explain that the blanch test is not valid in children, and that mental status should be used instead as the main indicator.



Participant Hand-book, page PH III-20.

PERFORMING A TRIAGE EVALUATION

- Refer the participants to the table in their Participant Handbooks. Explain that when conducting a triage evaluation, they should:
 - Start with the airway. At an arm's distance, shake the victim and shout. If the victim does not respond, then:
 - Position the airway.
 - Look, listen, and feel.
 - Check breathing (greater than 30 = I).
 - If the victim is not breathing after two attempts to open airway, then = **DEAD**.

TRIAGE IN A DISASTER ENVIRONMENT

- Go to bleeding.
 - Stop uncontrolled bleeding.
 - Perform blanch test (greater than 2 seconds = I).
- Go to mental status.
 - Ask the victim to follow a simple command (such as squeezing your hand). If no response, status = I.

If the victim passes all tests, status = **D**. If the victim fails one test, status = **I**. Remember that everyone gets a tag.

- Refer the participants to the flowchart in their Participant Handbooks and recommend that they study the flowchart outside of this session until they are very familiar with triage procedures. (Point out that "2 seconds" refers to the results of the capillary refill test.)
- Stress that time will be critical in a disaster. The participants will not be able to spend very much time with any single victim.
- Stress also that the participants should take advantage of local exercises as a means of main-training their triage skills and to help them avoid the triage pitfalls:

PITFALLS

INSTRUCTOR NOTES	CONTENT/ACTIVITY
DISASTER MEDICAL OPERATIONS	

Visual 3.29

Triage

Triage "pitfalls":

- Inadequate medical size-up
- No team plan, organization, or goal
- Indecisive leadership
- Too much focus on one injury
- Treatment (rather than triage) performed

Visual 3.29

- Inadequate medical size-up.
- No team plan, organization, or goal.
- Indecisive leadership.
- Too much focus on one injury.
- Treatment (rather than triage) performed.

Discussion question.

- Ask if anyone has any questions on how to perform triage.

Total Exercise:
30 minutes

Visual 3.30

Triage Exercise

- Victims will be given cards explaining injuries or symptoms
- A team will come in and evaluate based on the card's information
- Make a determination of the triage categories the victims are in.

Visual 3.30

EXERCISE: CONDUCTING TRIAGE

Instructor Note: This exercise is intended to allow the participants to practice conducting triage in a high-pressure situation. To conduct this exercise:

- Before the session, prepare 6 cards, each documenting the status of one disaster victim, as follows:
 - Victim #1: Ambulatory—responds to voice triage
Minor bleeding
Normal blanch
 - Victim #2: Bleeding extremity
Unconscious
After 2 attempts to open airway, still not breathing
 - Victim #3: Standing, but does not respond to voice commands
 - Victim #4: No signs of bleeding
Unconscious
Blanch takes 5 seconds
 - Victim #5: No bleeding
Conscious
Doesn't squeeze hand when asked
 - Victim #6: Minor bleeding
Conscious but disoriented
Breathing rate = 40 per minute

Remind the participants to bring their blankets to the disaster area.



Participant Handbooks, page PH IV-8, for an example of a triage documenting system.

Observe the rescuers as they plan for and conduct triage.

Take 3-5 minutes for each discussion.

2. Break the class into 6-person groups. Have enough sets of cards so that there will be one set for each group. In each group, 3 participants will act as victims, and 3 will act as search and rescue team members (2 rescuers and 1 runner).
3. Have the “victims” select a card from their set and tape it to their shirts.
4. Designate a “disaster” area for each group and ask the victims to arrange themselves within the designated area.
5. Explain to the participants that the 3 “rescuers” will have 5 minutes to:
 - Conduct triage on each of the victims and determine how each should be tagged and treated.
 - Document the number of victims in each category of triage (immediate, delayed, dead).
6. Begin the activity. At the end of the time period, call the groups together to discuss the results of the triage exercise. Discuss:
 - Problems that the rescuers encountered during triage.
 - How it felt to be under pressure to conduct triage within such a short period of time.

Relate the rescuers’ feelings about their time constraints to the pressure they will feel under actual conditions. Explain that they will learn ways to control some of their stresses in a later session.
7. Have the group members switch roles and repeat the activity, with the 3 new victims using the 3 unused cards, so that each participant has a chance to be a rescuer once.

INSTRUCTOR NOTES	CONTENT/ACTIVITY
DISASTER MEDICAL OPERATIONS	

? *Discussion question.*

*Total Topic:
5 minutes*

*Participant Hand-book, page PH
III-22.*

Present key points.

Visual 3.31

Session Summary
<ul style="list-style-type: none">• Treatment is as simple as ABC• Triage is conducted using ABC

Visual 3.31

SUMMARY AND TRANSITION

- Ask the participants if they have any questions about triage.

Instructor Note: Be sensitive to the participants and the difficulty of these decisions during a catastrophic event. Emphasize that planning and organization are necessary to do the “**greatest good for the greatest number.**”

SESSION SUMMARY

- Summarize the key points from this session:
 - CERT members’ ability to open airways, control bleeding, and treat for shock are critical to saving lives.
 - Use the Head-Tilt/Chin-Lift method for opening airways.
 - Control bleeding using direct pressure, elevation, and/or pressure points.
 - If there is a question about whether a victim is in shock, treat for shock.
 - Triage is a system for rapidly evaluating victims’ injuries and prioritizing them for treatment. The procedure for conducting triage evaluations involves checking:
 - The airway and breathing rate.
 - Circulation and bleeding.
 - Mental status.
- Remind the participants that disaster medical operations require careful planning, teamwork, and practice. Urge them to take advantage of participating in community-wide disaster exercises whenever they are scheduled.
- Ask the participants to read and become familiar with Session IV: Disaster Medical Operations— Part 2 before the next session.

INSTRUCTOR NOTES

CONTENT/ACTIVITY**DISASTER MEDICAL OPERATIONS**

- Remind the participants to bring a blanket, roller gauze, adhesive tape, and cardboard to the next session.
- Thank everyone for attending this session.

YOUR NOTES: